9/15/14 Minutes

**Movement-------------------------------------**

* current not an issue, PID causing the problem
* some motors are not starting at the same time as the others
* determine a way to ensure motors are at the same speed and are in sync

**Etch A Sketch-----------------------------------**

* the current arm is made of wood
  + the design is a proof of concept and not the final design
  + if the design fails, scrap it and begin again
  + if it works, the arm can then be fabricated from metal
  + currently in the assembly stage with discussion of the mounting of the knob twisting motors still going on.
  + This discussion of mounting has to be completed before the exact measurement math can be done for the final design.
  + for the proof of concept design, we have decided on a temporary mounting to continue the assembly.
  + Preliminary coding has been started for the operation of the twisting motors, but exact numerical values in the code cannot be decided on until the assembly of proof of concept can be complete.

**Chassis Design------------------------------------------**

* etch a sketch arm to be mounted on top of existing platform
  + the electronics/controls can be moved because they have longer wires
  + the undercarriage of the robot has been discussed as a possible location to relocate some of the electronics to clear space on the top of the robot for the manipulator arms.